## ABSTRACT OF THE DISCLOSURE

A machine tool is provided, in particular for the synchronous machining of workpieces. The tool includes two or more spindle units (2, 3), which run parallel in a machining unit and are designed to hold workpieces and repositioning devices for the precise adjustment of the position of the spindle units (2, 3) in relation to one another, preferably in all three directions x, y and z of the orthogonal co-ordinate system in the machining unit (4). The repositioning devices for displacing at least one of the spindle units (2, 3), at least in an x and/or y direction, include an eccentric bush (5, 6), which can be rotated about a central shaft (B1, B2) and locked and in which the spindle units (2, 3) are mounted eccentrically, parallel to the central shaft (B1, B2).

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